

AR17

*Can Corp*



1972  
ANNUAL  
REPORT

Northern Transportation Company Limited











## Annual Report 1972

### Northern Transportation Company Limited

#### HEAD OFFICE:

Suite 800, 151 Slater St., Ottawa, Canada, K1P 5H3

#### OPERATIONS OFFICE:

10040 - 105th Street, Edmonton, Alta.

### DIRECTORS

C.S. Cosulich  
W.M. Gilchrist  
W.B. Hunter  
P.L.P. Macdonnell  
L.R. Montpetit  
J.H. Parker  
H. Basil Robinson  
Murray Watts

### OFFICERS

President: W.M. Gilchrist  
Executive Vice-President: L.R. Montpetit  
Vice-President Operations: W.B. Hunter  
Secretary: R.C. Powell  
Treasurer: J.C. Orr

*The Tuktoyaktuk base for operations in the Western Arctic has been re-located and enlarged to handle the increased volume of cargo. MV Frank Broderick is shown loading at the main dock, with an LCM craft alongside. BELOW - The MV Pinnebog in the floating dry dock at Tuktoyaktuk.*

## PRESIDENT'S REPORT

The Honourable Jean Marchand,  
Minister of Transport,  
OTTAWA, Canada

Sir:

On behalf of the Board of Directors, and in accordance with Section 75(3) of the Financial Administration Act, I have the honour to submit the Annual Report of Northern Transportation Company Limited for the year ended December 31, 1972.

In reporting a year ago on the 1971 operations of the Company, I referred to the deteriorating financial results of recent years and projected that with the growth in traffic which could reasonably be forecast, the Company could expect to return to a profitable position by 1974. I am gratified to now report that this position was achieved in 1972, with an after-tax profit of \$1,821,019.

The improvement is attributable to a greater increase in tonnage than had been foreseen and an even greater increase in ton-miles, as compared with 1971, making the year under review the most active and financially successful in the Company's history. The highly successful performance in the 1972 season, in the face of a very substantial increase in traffic in a single year, reinforces the evidence of recent years that the Company has the ability to forecast, prepare for, and meet the challenges posed by fast-moving developments in this high risk operation.

Total freight and other operating revenue for the year amounted to \$15,849,267, an increase of \$8,095,160 or 105 per cent, as compared with 1971. Operating costs of \$11,218,647, exclusive of interest on debt, were higher by 43 per cent, while debt servicing charges decreased marginally.

Tonnage handled was 398,650, compared with 283,321, in 1971, and constitutes an all-time high.



More significantly, the number of ton-miles increased by some 88 per cent, reflecting a substantial upsurge in oil exploration activity in the sub-Arctic and Arctic regions.

### Worst Weather in Company's History

Reference has been made in the past to the difficulties attendant upon an uneven flow of traffic, giving rise to a lack of freight in the high-water early season, and an abundance in the difficult latter part of the season when water levels tend to be lower and when weather conditions are likely to be unfavorable. In 1972, some success was achieved in smoothing out this pattern. On the negative side, however, weather and ice conditions in the Eastern portion of the Western Arctic were the worst in the Company's history; and one week of shipping capability was lost at the outset of the season due to late break-up.

The 1972 season, with its substantial increase in traffic, saw the Company operating continuously at the outer limits of its fleet capacity. Moreover, due to poor weather at the end of the season, many marine units are wintered elsewhere than at the Hay River terminal, since it was necessary to use them to the last possible moment to complete freight deliveries. Although this will make for some difficulties at the beginning of the 1973 navigation season, the position in this respect will be somewhat better than at the start of the season under review.

While the 1971 dredging program carried out at the Sans Sault Rapids afforded some improvement in the navigability of this bottleneck, the program was not an unqualified success and much remains to be done. Representations to the responsible departments of government continue to be made on the matter of dredging and improving the Mackenzie River in order to provide a marine highway to the Arctic consistent with the potential of this remarkable natural waterway, to serve the urgent and impending needs of this important area of Canada.



*The Bell Voyager air-cushion vehicle, capable of carrying a 25-ton payload on her deck, skims the waters of Lake Ontario off Port Hope and (lower left) makes a shore landing. The vehicle is now under continuing tests at Tuktoyaktuk.-*

### Major Expansion Program

Capital expenditures made in 1972 amounted to approximately \$4,000,000, and were in excess of the program forecast in last year's Annual Report. Of this total, freight-handling equipment accounted for \$1.4 million; marine equipment upgrading and preliminary costs on the 1973 program, \$1,085,000; and shipyard and terminal installations \$1,250,000.

Extensive analysis of traffic patterns and projections, recognizing the continuing development of the communities served by the Company and the burgeoning activity in oil and gas exploration, has indicated that an increase in freight traffic of at least 25 per cent will occur in 1973. In view of the utilization of the present fleet to its utmost capacity in 1972, this projection dictates a major expansion of the fleet in time for the 1973 season. To this end, your Company has placed contracts for four mainliner tugs, a yarding tug, and 20 barges of 1500-ton capacity. Together with the ancillary freight-handling equipment, shore installations, service buildings, and the acquisition of a trucking company, the program will involve an investment of some \$35,000,000, to be financed in part through earnings but largely through loans.

43 tug  
20 barges



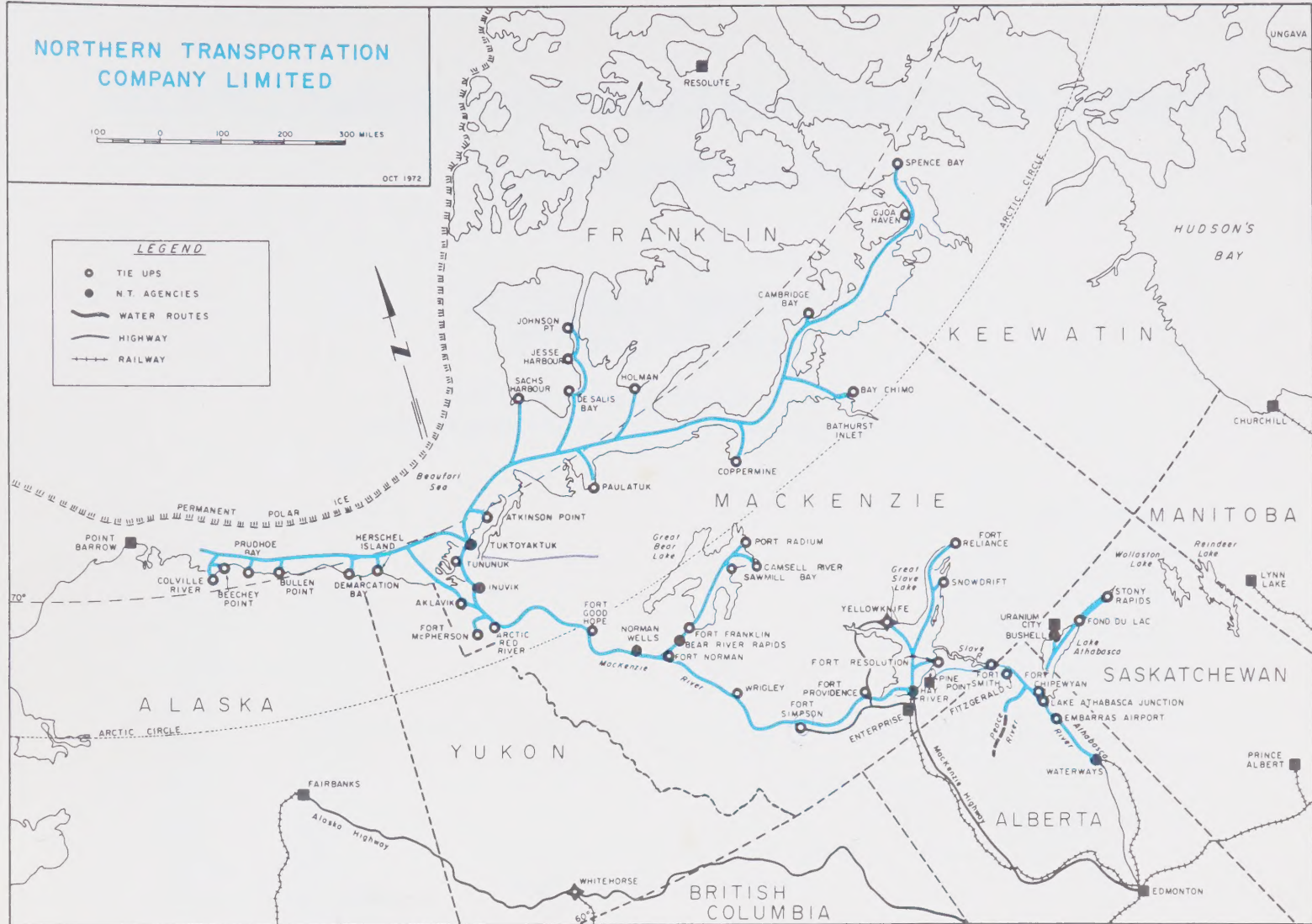
# NORTHERN TRANSPORTATION COMPANY LIMITED

100 0 100 200 300 MILES

OCT 1972

## LEGEND

- TIE UPS
- N.T. AGENCIES
- WATER ROUTES
- HIGHWAY
- RAILWAY



## SAILING - MILEAGES (STATUTE)

### ARCTIC AREA

#### EASTWARD

	MILE	0
TUKTOYAKTUK	81	0
ATKINSON POINT	269	0
SACHS HARBOR	322	0
PAULATUK	336	0
DE SALIS BAY	396	0
HOLMAN ISLAND	417	0
JESSE BAY	456	0
COPPERMINE	830	0
BAY CHIMO	715	0
CAMBRIDGE BAY	785	0
GUJA HAVEN	1042	0
SPENCE BAY	1150	0

#### WESTWARD

	MILE	0
TUKTOYAKTUK	161	0
HERSCHEL ISLAND	225	0
DEMARCATION BAY	378	0
BULLEN POINT USA	431	0
PRUDHOE BAY USA	470	0
COLVILLE RIVER USA	480	0
BEECHY POINT USA	480	0

\* (SHALLOW APPROACHES REQUIRE CIRCUITOUS ROUTE)

### MACKENZIE AREA

#### HAY RIVER - NORTHWARD

	MILE	0
HAY RIVER	238	0
FORT SIMPSON	390	0
WRIGHT	540	0
FORT NORMAN	591	0
NORMAN WELLS	711	0
FORT GOOD HOPE	925	0
ARCTIC RED RIVER	980	0
FORT McPHERSON	1025	0
AKLAVIK	1042	0
INUVIK	1122	0
TUKTOYAKTUK	1122	0

### GREAT SLAVE LAKE

	MILE	0
HAY RIVER	74	0
RESOLUTION	126	0
YELLOWKNIFE	218	0
SNOWDRIFT	285	0
FORT RELIANCE	285	0
FORT NORMAN	74	0
BEAR RIVER RAPIDS	126	0
FORT FRANKLIN	218	0
SAMMILL BAY	285	0
CAMSELL RIVER	285	0
FORT RADIUM	285	0

### GREAT BEAR LAKE

	MILE	0
FORT NORMAN	31	0
BEAR RIVER RAPIDS	77	0
FORT FRANKLIN	165	0
SAMMILL BAY	175	0
CAMSELL RIVER	247	0
FORT RADIUM	247	0

### ATHABASCA AREA

	MILE	0
WATERWAYS	115	0
EMBARRAS AIRPORT	180	0
LAKE ATHABASCA JUNCTION	200	0
FORT CHIPEWYAN	202	0
FITZGERALD	275	0
BUSHELL	328	0
FOND DU LAC	328	0
STONY RAPIDS	379	0

This 1973 program is one further stage in the expansion and upgrading of your Company's equipment and facilities begun in late 1968 as a long-range plan designed to make possible the most economic and efficient freight-moving service for the area served. This plan, under constant review, is designed to ensure that the Company will be in a position to not only serve the fast-growing needs of the communities and the hydrocarbon exploration programs of this far-flung region, but also to be ready to handle the tremendous freight tonnages which may ultimately be associated with oil and gas pipelines from the Arctic. Since the start of this expansionary trend, it is interesting to note that in the four-year period tonnage has doubled, ton-miles have increased more than three-fold, and revenues have increased correspondingly.

## Expanded Transportation Services

As indicated in last year's report, it is the Company's intention to broaden its base and to seek to increase revenues from activities related to transportation. To this end, shore facilities at Hay River, Inuvik and Tuktoyaktuk are kept open on a year-round basis, providing certain warehousing, expediting and trucking services. As planned, experimental container movements were initiated in 1972 and it is the aim of the Company to proceed with conversion to containerization of a large part of the system.

In order to provide an integrated transportation system and to assist in implementation of the containerization program, the Company has undertaken

Continued on Page 11

*what assurance of continuing*



# NORTHERN TRANSPORTATION COMPANY LIMITED

and subsidiary company

## Consolidated Statement of Income and Expense

for the year ended December 31, 1972  
(with comparative figures for the year ended December 31, 1971)

	1972	1971
<b>Income:</b>		
Freight earnings .....	\$ 15,849,267	\$ 7,754,107
<b>Expense:</b>		
Operation and maintenance:		
Salaries and wages .....	4,291,998	2,950,579
Depreciation .....	2,465,771	2,208,308
Repairs and maintenance .....	1,741,423	865,180
Fuels and lubricants .....	759,362	555,904
Messing .....	265,169	143,611
Transportation of employees .....	131,940	97,785
Claims and freight losses .....	125,931	31,210
Pallets and shrinkwrap .....	102,487	123,328
Grants in lieu of municipal taxes .....	99,526	68,772
Rental of vessel .....	81,270	—
Insurance .....	49,024	13,687
Wharfage, demurrage and railway spur .....	17,935	27,444
Miscellaneous .....	180,030	117,286
	<u>10,311,866</u>	<u>7,203,094</u>
Administration:		
Executive officers' salaries .....	145,589	137,771
Other salaries .....	196,358	180,329
Advertising and public relations .....	155,457	58,146
Head Office .....	100,000	66,000
Telephone and telegraph .....	52,285	30,866
Depreciation .....	41,008	15,669
Business tax .....	37,553	32,517
Provision for doubtful accounts .....	32,998	59,875
Travel .....	32,099	33,759
Stationery and office supplies .....	19,776	14,606
Miscellaneous .....	93,658	61,514
	<u>906,781</u>	<u>691,052</u>
	<u>11,218,647</u>	<u>7,894,146</u>
Net income (loss) from operations .....	4,630,620	( 140,039)
<b>Other Income:</b>		
Interest on investments .....	85,717	73,890
Gain on disposal of capital assets .....	4,810	4,107
	<u>90,527</u>	<u>77,997</u>
	4,721,147	( 62,042)
Interest on loans from Canada .....	1,115,027	1,159,778
Net income before provision for income tax .....	3,606,120	(1,221,820)
Provision for income tax .....	1,650,897	—
<b>Net Income (Loss)</b> .....	<u>\$ 1,955,223</u>	<u>\$ (1,221,820)</u>

The accompanying notes are an integral part of the financial statements.

# NORTHERN TRANSPORTATION COMPANY LIMITED

and subsidiary company

## Consolidated Statement of Retained Earnings

for the year ended December 31, 1972

(with comparative figures for the year ended December 31, 1971)

	1972	1971
Balance at January 1 .....	\$ 5,395,008	\$ 6,816,828
Net profit (loss) for year .....	1,955,223	(1,221,820)
	7,350,231	5,595,008
Transfer to reserve for insurance .....	300,000	200,000
Balance at December 31 .....	<u>\$ 7,050,231</u>	<u>\$ 5,395,008</u>

The accompanying notes are an integral part of the financial statements.

## Statement of Source and Application of Funds

for the year ended December 31, 1972

(with comparative figures for the year ended December 31, 1971)

	1972	1971
<b>Source of Funds:</b>		
Net Income (Loss) .....	\$ 1,955,223	\$ (1,221,820)
Items charged to operations not requiring current outlay of funds .....	4,291,913	2,228,821
	6,247,136	1,007,001
Loans from Canada .....	2,000,000	3,600,000
Deposits, ship construction .....	32,700	—
	<u>8,279,836</u>	<u>4,607,001</u>
<b>Application of Funds:</b>		
Capital Assets .....	3,279,122	2,177,177
Advances to contractors for acquisition of capital assets .....	1,343,028	—
Repayment of loans from Canada .....	3,000,000	1,000,000
Insurance investment fund .....	300,000	200,000
	<u>7,922,150</u>	<u>3,377,177</u>
	357,686	1,229,824
Working Capital at the beginning of the year .....	(1,452,812)	(2,682,636)
Working Capital at the end of the year .....	<u>\$ (1,095,126)</u>	<u>\$ (1,452,812)</u>

The accompanying notes are an integral part of the financial statements.

# NORTHERN TRANSPORTATION

and subsidiaries

Consolidated

at December 31, 1972  
(with comparative figures for 1971)

## ASSETS

	1972	1971
<b>Current Assets:</b>		
Cash .....	\$ 147,319	\$ 84,090
Short-term deposits .....	1,200,000	700,000
Accounts receivable .....	1,659,488	901,091
Operating and general supplies, at cost .....	695,469	545,252
Prepaid expense .....	17,839	1,000
	<u>3,720,115</u>	<u>2,231,433</u>
 <b>Short-term Deposits held for</b>		
Insurance Investment Fund .....	<u>1,000,000</u>	<u>700,000</u>
 <b>Capital Assets, at cost:</b>		
Land .....	304,648	279,488
Buildings, including equipment .....	12,704,212	10,975,081
Boats and barges, including equipment .....	31,377,594	30,892,969
Automotive equipment .....	3,312,497	2,386,560
Other .....	316,250	233,162
	<u>48,015,201</u>	<u>44,767,260</u>
 Less: Accumulated depreciation .....	<u>25,004,006</u>	<u>22,523,562</u>
	23,011,195	22,243,698
Advances to contractors (Note 5) .....	<u>1,343,028</u>	<u>—</u>
	<u>24,354,223</u>	<u>22,243,698</u>
	<u>\$ 29,074,338</u>	<u>\$ 25,175,131</u>

The accompanying notes are an integral part of the financial statements.

Approved on behalf of the Board  
W. M. GILCHRIST, *Director*  
MURRAY WATTS, *Director*



# ION COMPANY LIMITED

ry company

## Balance Sheet

31, 1972

t December 31, 1971)

### LIABILITIES

	1972	1971
<b>Current Liabilities:</b>		
Accounts payable .....	\$ 1,356,016	\$ 788,618
Loans from Canada due within one year (Note 2) .....	3,459,225	2,722,974
Income tax payable .....	— —	172,653
	<u>4,815,241</u>	<u>3,684,245</u>
 Loans from Canada (Note 2) .....	 12,600,000	 13,600,000
 Deferred Income Tax (Note 3) .....	 2,420,680	 640,392
 <b>Capital:</b>		
Capital Stock:		
Authorized — 50,000 shares of no par value		
Issued — 1,520 shares, fully paid .....	152,000	152,000
Reserve for insurance .....	1,000,000	700,000
Contributed surplus (Note 4) .....	1,036,186	1,003,486
Retained earnings .....	7,050,231	5,395,008
	<u>9,238,417</u>	<u>7,250,494</u>
	<u>\$ 29,074,338</u>	<u>\$ 25,175,131</u>

I have examined the above Consolidated Balance Sheet and the related Consolidated Statements of Income and Expense, Retained Earnings and Source and Application of Funds and have reported thereon under date of March 8, 1973 to the Minister of Transport.

A. M. HENDERSON,  
Auditor General of Canada



## NORTHERN TRANSPORTATION COMPANY LIMITED

and subsidiary company

### Notes to Financial Statements

#### 1. Subsidiary Company

The subsidiary company, Yellowknife Transportation Company Limited is inoperative. Its assets were taken over and liabilities assumed by Northern Transportation Company Limited in an earlier period.

#### 2. Loans from Canada

The Company has borrowed \$23,100,000, subject to terms and conditions prescribed by the Governor in Council. Outstanding principal and interest at December 31, 1972 amounted to \$16,059,225, of which \$3,459,225 is due to be repaid within one year and the balance of \$12,600,000 is repayable by October 15, 1976.

#### 3. Deferred Income Tax

The Company records depreciation based on the expected useful life of its capital assets but claims maximum capital cost allowance permitted under the Income Tax Act in calculating its taxable income. The Deferred Income Tax account is credited with the income tax payable on the excess of capital cost allowance over depreciation and is charged when the converse prevails. In 1972 the account was credited with \$1,780,288.

#### 4. Contributed Surplus

During the year the Company acquired deposits made by two shipowners with the Department of Industry, Trade and Commerce in connection with the conversion and repowering of two of its tugs. These deposits totalled \$132,348, of which \$93,648 was remitted to the two companies concerned, \$5,400 was paid to brokers for negotiating the transactions, \$600 was disbursed as legal fees, and the balance of \$32,700 was recorded as contributed surplus.

#### 5. Commitments

At December 31, 1972, the Company was committed under contracts to the acquisition of tugs and barges at a cost of \$15,900,000, against which it had advanced \$1,343,028.

#### 6. Supplementary Information

The Company has eight directors and five officers; three officers are also directors. Remuneration of directors as directors was \$2,000 and remuneration of officers as officers, \$77,000.

## AUDITOR GENERAL OF CANADA

Ottawa, March 8, 1973.

The Honourable Jean Marchand,  
Minister of Transport,  
Ottawa.

Sir,

I have examined the accounts and financial statements of Northern Transportation Company Limited and its subsidiary company for the year ended December 31, 1972. My examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as I considered necessary in the circumstances.

In compliance with the requirements of Section 77 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company and its subsidiary;
- (b) the financial statements of the Company and its subsidiary

- (i) were prepared on a basis consistent with that of the preceding year and are in agreement with their books of account,
  - (ii) in the case of the balance sheet, give a true and fair view of the state of their affairs as at the end of the financial year, and
  - (iii) in the case of the statement of income and expense, give a true and fair view of their income and expense for the financial year, and
  - (iv) in the case of the statement of source and application of funds, present fairly the source and application of their funds for the financial year; and
- (c) the transactions of the Company and its subsidiary that have come under my notice have been within their powers under the Financial Administration Act and any other Act applicable to them.

Yours faithfully,  
A.M. HENDERSON,  
Auditor General of Canada.





*MV Knut Lang in the Syncrolift at Hay River terminal, being readied for Winter storage.*

## PRESIDENT'S REPORT

*Continued from Page 5*

to acquire Grimshaw Trucking and Distributing Limited, a well-established company now operating from an Edmonton base to points in Alberta and the Northwest Territories. This company, which will retain its identity, will function as a wholly-owned subsidiary with its operations co-ordinated with those of the parent. Most significantly, this acquisition will enable your Company to make greater use of terminal facilities and certain equipment heretofore used only on a seasonal basis.

### Testing Air-Cushion Vehicles

Looking to the future, and to the unique possibilities involved, your Company is engaged in evaluating a novel form of transportation, the air-cushion vehicle, as to its adaptability and usefulness under Far North conditions.

*Freight-handling is being expedited by increasing use of containers, such as the brightly-painted pair with the NTCL symbol speeding northward by rail to the Hay River terminal. Capacity of each 20-foot container is 40,000 pounds.*

Under test at the request of its owner, the Ministry of Transport, is a Bell "Voyageur", built in Canada and the first of its kind designed essentially for freight service. The flat-deck unit, capable of carrying a 25-ton payload, skims over water, land or ice on a cushion of air. Testing was begun last summer on Lake Ontario, at Port Hope. The "Voyageur" has now been air-lifted to the Company's Tuktoyaktuk base and will be operated until Fall in the Arctic and Mackenzie River regions. A primary objective is to identify its long-term commercial applications.

NTCL is pioneering in the commercial applications of the air-cushion vehicle in the North and the evaluation program may yield important information about this novel means of transportation in areas where the terrain is difficult and concern for the environment is a paramount consideration.

Mr. A.B. Caywood relinquished his Directorship in the latter part of the year. Early in the year, Mr. Henry Christoffersen retired from his position as Mechanical Superintendent after some 38 years with the Company. He has been succeeded in this position by Mr. Bert Stromberg. However, Mr. Christoffersen's long experience is fortunately still available to the Company in a part time consulting capacity.

In the 1972 operating season, the work force reached a maximum of 707 persons, of whom 175 were permanent residents of the northern areas in which the Company operates. Wages and salaries paid amounted to \$4,975,156, and the Company contributed \$241,003 as its share of the pension, group life insurance, wage-loss insurance and medical welfare programs.

The past season was a very difficult one from an operating standpoint, and it is a pleasure to put on record the warm appreciation of the Board of the work accomplished by the Company's employees during the year.

For the Directors

*W. M. Gledhill*

President

Ottawa, Canada

January 25, 1973









# NORTHERN TRANSPORTATION COMPANY LIMITED

In 1931 a tiny tug towing two wooden barges chugged down the Mackenzie on its way to Aklavik, carrying supplies to the relatively few outposts of civilization along the mighty river.

That maiden voyage was the beginning of what is now Northern Transportation Company Limited. Today the Company's fleet thrusts its way along a 4,800-mile system throughout the Mackenzie Basin and the Western Arctic. It handles about 85 per cent of all the marine traffic in the area it serves. Since 1944, when it became a Crown Corporation, the fleet has carried four million tons of freight. Its operations constitute the principal transportation lifeline serving general community freighting needs and provide the logistic support for oil, gas and mineral exploration and development.

The little tug and its barges have long since rotted away. Today the NTCL fleet comprises three ocean-going ships, 28 diesel tugs, and 145 all-steel, dual-purpose barges with capacities up to 1,500 tons, providing a registered aggregate gross of 50,000 tons. In 1972 the Company moved almost 400,000 tons, a new record, and the season's 294,000,000 ton-miles exceeded the previous high mark by 70 per cent.

## Met the Challenges of Progress

As has been true from the beginning, each leap and bound in the Company's progress has been spurred by historic developments, mainly of a resource nature. In 1933 the original Northern Waterways Limited expanded its service into Bear River and Great Bear Lake to meet the needs of the developing Port Radium Mine, and in 1938 ownership was acquired by Eldorado Gold Mines Limited. The name had been changed to Northern Transportation Company Limited with a previous change of ownership, in 1934.

Initiation of the Canol Project in 1941, and re-opening of the Port Radium mine in 1942 because of the urgent and highly-secret need for uranium for military purposes, brought all NTCL equipment into service for the duration of World War II. When the Canol Project was abandoned in 1944, NTCL contracted to bring out 25,000 tons of equipment and materials, a formidable task.

In 1944 Northern Transportation Company Limited became a Crown Corporation when its parent, Eldorado Mining and Refining Limited (now Eldorado Nuclear Limited) was expropriated by the Government of Canada because of the vital nature of its operations and its products in the Allied war effort.

All transportation on the Mackenzie system was brought under regulation of the Board of Transport Commissioners in 1946. When Hudson's Bay Transport decided to discontinue operations as a common carrier on the Mackenzie in 1947, NTCL added vessels to handle the additional freight.

*Terminal not only for all northbound freight, but for ship-building and maintenance and Winter storage of the Mackenzie River fleet, the NTCL Hay River facility has been greatly enlarged and modernized. (Lower) the Syncrolift and storage area, with Great Slave Lake in background.*

*Beating freeze-up by a matter of hours, MV Vic Ingraham is hoisted by the Syncrolift for Winter storage.*

## Postwar Developments

Operations of NTCL were extended into the Western Arctic for the first time in 1947, when the Company was asked by the R.C.A.F. to operate the supply ship *Snowbird* between Tuktoyaktuk and Cambridge Bay. Subsequently the sea-going tug *Radium Dew* and three steel barges were specially designed and built to deliver construction materials for six DEW Line sites in the Mackenzie Delta, in 1955. Three years later the Company began re-supply of 25 DEW Line sites along the Arctic Coast, operating LST's - - wartime-type landing craft - - and tankers made available under a loan agreement between the United States and Canadian governments. A floating drydock became a part of the repair and maintenance facility at Tuktoyaktuk. The







TOP - MV Vic Ingraham making her final run of 1972 season to Hay River, with a train of empty barges. CENTRE - Comfortable quarters for employees at NTCL Tuktoyaktuk base. LOWER - Secondary storage area and rail lines at Hay River terminal.



range of Arctic service now reaches from Colville River, Alaska, to Spence Bay on Boothia Peninsula, as well as to Arctic Islands where oil and gas exploration and development are in progress.

### The Uranium Boom, and Its Aftermath

Concurrent with the extension of its service into the Arctic, NTCL was steadily enlarging its fleet to take care of the heavy freight increase arising from the opening of new mines around Lake Athabaska in the uranium boom of the 1950's. Three new vessels and 27 steel barges were built, but some of these went into mothballs in 1960 when five mines in the Beaverlodge area, as well as the Eldorado Port Radium mine, ceased operations.

In 1963, at the request of the Hudson's Bay Company, NTCL took over the freight service which had been provided by that company in the Western Arctic, and acquired the motor vessel *Banksland*. NTCL put into service, in July, 1963, the motor vessel *Frank Broderick*, especially designed for operation in the Arctic. The ship was later extended to increase her capacity. The Company also operates the tanker *Pinnebog* in Arctic waters. Early in 1965 NTCL acquired Yellowknife Transportation Company Limited which had carried on somewhat parallel shipping services, now integrated with those of the Company.

### Experience and Ingenuity Pay Off

The development of the service provided by Northern Transportation Company Limited has been a matter of meeting unique challenges in innovative ways and by constant application of experience over more than 40 years on the waters of the Far North. Vagaries of climate often upset the best-laid plans. The shipping seasons are always too short, varying from as few as 117 days to as many as 133 days from Spring break-up to freeze-up on the Mackenzie, and rarely more than 50 to 55 days in the Arctic.

Water levels in the river, especially in a 40-mile section where dredging is badly needed, often impose frustrating limits upon the tonnages that can be carried in the barges. Early freeze-up, as happened on the Mackenzie in the Fall of 1972, can leave homebound vessels and barges trapped for the Winter far from their normal base. Fortunately, there have been few occasions in the Company's history when it failed to fulfil delivery commitments of its customers in spite of winds, weather or low water.

### Facing New Challenges

In recent years the burgeoning of oil, gas and mineral exploration and development in the Mackenzie Delta and on Western Arctic shores and islands, has created new challenges to the skills and ingenuity of NTCL personnel.



The volume of cargo has pressed into use every seaworthy vessel and every other facility of the Company. Often the nature of the varied cargo, in bulk, size, weight and shape, demands resort to new and highly specialized equipment such as great, floating cranes, powerful cargo-movers, and special devices by which machinery and materials can be off-loaded on shorelines where no docking is possible. The Company is fortunate in having the experience of men who have wrestled with similar problems before, particularly during the construction and supply of DEW Line stations in the 1950's and 1960's.

The Company is engaged in major expansion of its fleet and shore facilities to handle the heavy increase in traffic now and in the foreseeable future. It is pushing rapidly ahead with containerization as a means to effect speedier and more efficient service. It has acquired a trucking firm to expedite incoming freight from the South. Some of its operations are being placed on a year-round basis to improve service.

Aircraft, including helicopters, have long been extremely useful adjuncts in NTCL operations. Two-way radio, radar, sonar, and other electronic gear are as much a part of running the fleet as engines and anchors.

NTCL believes that even the spectacular progress in recent years has been but a prelude to vast future development in the Canadian North. The Company's planning is projected both to keep abreast of and to anticipate each vital transportation need. In keeping with this aim, it is engaged in evaluating the commercial possibilities of a novel and highly sophisticated mode of transportation, the air-cushion vehicle, in the Northern environment.

If the man who piloted that puffing little tug down the Mackenzie River, in 1931, were to see a Hovercraft whizzing by, or even a 4,500hp tug and a 7,500-ton barge train, he simply would not believe the 1973 version of the story of Northern Transportation Company Limited.

*Newly-established freight yard of NTCL at Inuvik, with Imperial Oil tank farm in background (TOP LEFT). Typical of many unloading operations is this one at a road construction site near Arctic Red River (TOP RIGHT).*

*Yarding tug at Hay River assembling bargeloads of "sea-can" containers of oil drilling supplies for movement to the Arctic (LOWER LEFT). Main storage and loading yard of NTCL at Hay River is situated on nearby island, and is capable of handling 10,000 tons per day (LOWER RIGHT).*







*Putting heavy cargo ashore at remote locations with no docking facility entails both ingenuity and the use of special equipment. At a Gulf Oil site at Swimming Point, east of Tuktoyaktuk on the Western Arctic Coast, a barge-mounted hoisting crane with a 90-foot boom and a lifting capacity of 125 tons can handle even the largest drilling rig or cargo container.*